



# **WNU Course on " Key Issues in the World Nuclear Industry Today "**

## ***Short Course OVERVIEW AND KEY TOPICS IN THE WORLD NUCLEAR INDUSTRY TODAY***

**Seoul, South Korea**

**13-15 July 2015**

### ***Purpose***

This course is designed to enhance the knowledge about how nuclear science and technology which are applied in the world today, while encouraging an expansive view of where it is likely to go in the future. International experts will lecture on a wide range of topics with the aim of offering practical knowledge, a global perspective and an exciting vision of the future, which should stimulate interest among attendees in pursuing further careers in this area.

The overall aim of the course is to give attendees a comprehensive knowledge of the key issues in the world industry today, to enable them to place their own current role into perspective while also opening their eyes to the opportunities of the future.

### ***Venue***

Geon-Seol-He-Gan (71-2 Non-Hyun-dong, Gang-Nam-gu, Seoul, Republic of Korea)

### ***Participants***

Participants will be university students in nuclear science and engineering, staff at nuclear research centers, professionals in the local nuclear industry and equivalent government employees, including regulators and energy planners. They will generally be people with some background knowledge of nuclear and maybe some specialist knowledge in one or more areas.

### ***Lecturers***

Leading world experts from IAEA, WNA, WNU, KAERI will present overviews of a full range of nuclear-related topics (see the draft programme below). Lecturers are encouraged to summarise key points and draw out important issues for further discussion. These will be taken up at coffee breaks, lunches and dinners, where the teaching faculty will be freely available to stimulate discussion and debate.

### ***Awarded Best Training Course***

In 2014, this course was shortlisted as the best training course with less than 2 weeks duration by the Nuclear Engineering International magazine.

### ***Registration***

- Fee: 500,000 KRW/person or 500 USD
  - Application form by mail or e-mail
  - By 30 June, 2015
  - Payment may be made by wire transfer to the following bank account
    - Name and Address of account holder:  
Korea Atomic Energy Research Institute  
111, Daedeok-daero 989beon-gil, Yuseong-gu, Daejeon, Korea
    - Bank Name and Address:  
Woori bank  
111, Daedeok-daero 989 beon-gil, Yuseong-gu, Daejeon, Korea
    - Accountant Number:  
087-074376-03-001
    - SWIFT CODE:  
HVBKKRSEXXX
- Contact Byungduk Yoo (+82-10-5476-4728)

### ***Contact Point***

Course organizer

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*Short Course*  
**OVERVIEW AND KEY TOPICS IN THE WORLD NUCLEAR INDUSTRY TODAY**  
**Seoul, South Korea, 13-15 July 2015**

**PROGRAMME**

**13 July (Mon)**

09:00-09:15 Opening Ceremony  
09:15-09:30 Introduction to WNU and the course, *S. Gorlin*  
09:30-10:30 Nuclear Power in the World Energy Context, *S. Gorlin*  
10:30-11:00 Refreshment Break  
11:00-12:00 Nuclear Economics, *M. Caplan*  
12:00-13:30 Lunch  
13:30-15:00 Nuclear Project Structuring and Financing, *M. Caplan*  
15:00-15:15 Refreshment Break  
15:15-16:15 Nuclear Fuel Market, *M. Caplan*  
16:15-17:00 Wrap up and Discussion

**14 July (Tues)**






09:00-10:00 Nuclear Industry Development, *S. Gorlin*  
10:00-10:30 Refreshment Break  
10:30-12:00 Nuclear Safety, Security and Safeguards: The International Regime, *A. Gonzalez*  
12:00-13:30 Lunch  
13:30-15:00 Lessons from the Major Nuclear Events: Feedback into the International Safety Regime, *A. Gonzalez*  
15:00-15:15 Refreshment Break  
15:15-15:45 Fukushima Accident Report, *A. Gonzalez*  
15:45-16:45 Korean experience in NPP development and supply chain challenges, *Jae Kyu Lee*  
16:45-17:00 Wrap up and Discussion

**15 July (Wed)**

09:00-10:00 Nuclear Power Plant Technology Selection Criteria, *M. Caplan*  
10:00-10:30 Refreshment Break  
10:30-11:30 Country Case Studies, *M. Caplan*  
11:30-12:30 Small and Medium Size Reactors, *Keung Koo Kim*  
12:30-14:00 Lunch  
14:00-15:00 Nuclear Transport, *S. Gorlin*  
15:00-16:00 Wrap up and Discussion  
16:00-16:30 Closing Ceremony

※ All lectures are in English.

## Lecturers

	<p><b>Serge Gorlin</b>          Director of Industry Cooperation at the WNA, the coordinator of WNU, Author of "Nuclear English"</p>		<p><b>Milton Caplan</b>          President          MZ Consulting Inc.,          Chair of the WNA Economics Working Group</p>
	<p><b>Abel J. Gonzalez</b>          Representative at the UNSCEAR. Member of the IAEA-CSS, Senior Advisor to the Nuclear Regulatory Authority of Argentina</p>		<p><b>Jae Kyu Lee</b>          Vice President (Professor), Human Resource Development Center, KEPCO Engineering &amp; Construction Company</p>
	<p><b>Keung Koo Kim</b>          Director, SMART PM Advanced Reactor Development, Korea Atomic Energy Research Institute</p>		

## **Sergio Gorlin**

Serge Gorlin is Head of Industry Cooperation at the World Nuclear Association, the international trade association for nuclear energy based in London, England. His career in nuclear began as a translator and interpreter at British Nuclear Fuels (1996 – 2000). After a period as an independent consultant, he joined the World Nuclear Association as a Writer and Analyst in 2005. He assumed his current role in 2013. Within WNA, Serge is responsible for the WNA's Working Groups - forums for global industry cooperation on nuclear issues – and takes a leading role on trade and transport issues. Outside WNA, he is a member of the IAEA's Transport Safety Committee (TRANSSC), as well as a former Chairman of the International Steering Committee on Denial of Shipments, convened by the IAEA between 2006 and 2013. In 2005, Serge published a textbook for learners of English working in the nuclear field entitled Nuclear English (WNU Press). It remains widely used at companies, research institutes and universities worldwide. Serge has a bachelor's degree in Russian Studies from the University of Sheffield and a Master's Degree in Translation from the University of Kent.

## **Abel González**

Abel J. González has worked in radiation protection for the last four decades, most recently as Director of Radiation, Transport and Waste Safety, the senior radiation safety official of the International Atomic Energy Agency (IAEA). Previously, in his native Argentina, he was a Director of the Argentine National Atomic Energy Commission and President of the Argentine Nuclear Power Plant Corporation. He is a founding member of the Argentine Radiation Protection Society.

Mr González was a member of International Commission on Radiological Protection (ICRP) Committee 4 from 1978 to 2000 and is currently an ICRP commissioner, member of the ICRP Main Commission. He is one of the longest serving participants of the United Nations Committee on the Effects of Atomic Radiation (UNSCEAR). He is also member of the IAEA Commission on Safety Standards.

He has been honoured with a number of awards, notably: the IAEA Distinguished Service Award in recognition of his work for the International Chernobyl Project; the Morgan Award of the Health Physics Society (twice); the Lauriston S. Taylor Award of the National Council on Radiation Protection and Measurements; and, most recently, the Sievert Award for outstanding contributions to the field of radiation protection. Mr. González graduated in 1964 from the University of Buenos Aires (UBA) with the highest diploma in engineering. In 1962, while still an undergraduate, he began his professional career as a staff member of the Argentine National Atomic Energy Commission (CNEA) specializing in the fields of radiation protection, safety of radioactive waste management and of radioactive materials transport, and related aspects of nuclear safety.

## **Milton Caplan**

Milton Caplan is President of MZ Consulting Inc. He has more than 25 years senior experience in the nuclear industry primarily in the areas of project development, strategy formulation, business model development, economic assessment, project financing and contract negotiation. He has a very keen interest in issues related to the overall competitiveness of projects, and how deals will have to be structured to manage the risks.

## **Jaekyu Lee**

JK Lee started his career in 1980 at SAMSUNG GROUP, right after graduated from Hanyang University with a M.S in Mechanical engineering. Now he has been working for KEPCO E&C(KEPCO Engineering & Construction Company) for more than 30 years since the 1984 and he took a degree in Master of Business Administration from Seoul National University thereafter.

Mr. Lee has been in charge of overseas and marketing business in KEPCO E&C since the 2005. Prior to taking this position, he had participated in the designing, engineering, construction and start-up of more than 10 nuclear units during the last over 20 years. His practice consists primarily of the implementation of nuclear engineering and, in particular, has extensive experience in all aspects of Nuclear Power Plant (NPP) Project such as overseas business development, engineering, feasibility study, bidding process and commissioning.

He has acquired such various nuclear engineering knowledge and experience through the Korea YGN 1&2 NPP Project, UCN 3&4 NPP Project, YGN 3&4 NPP Project, OPR100 NPP Project and Shin-Kori 1&2 NPP Project.

He is a Mechanical Professional Engineer (PE) and a member of the Korean Professional Engineer Association.

## **Keung Koo Kim**

Dr. Kim received a bachelor's degree and Master's in Nuclear Engineering from Seoul National University (1981 and 1983) and Ph.D's degree in Nuclear Engineering from M.I.T in USA(1992).

Dr. Kim worked at Korea Atomic Energy Research Institute for 8 years after the graduation of Seoul National University. Then he moved to USA for further study. After the Ph.D degree, he joined Korea Atomic Energy Research Institute again as a senior researcher.

Dr. Kim started his career involving Wolsung NPP (PHWR) fuel technology localization project After success of fuel development project, he joined the HANARO(Korean Research Reactor) design and construction team. In 1997, HANARO construction was completed, Dr. Kim joined the SMART development project. Currently he is a SMART Project Manager. His specialties are system dynamic analysis, and advanced control system design.

## Venue Information

### Geon-Seol-He-Gan

Address: 71-2 Non-Hyun-dong, Gang-Nam-gu, Seoul, Republic of Korea

Tel: 02) 3449-8687

- Metro
  - line 7(Hak-dong station) gate 10
  - line 3(ApGuCheong station) gate 1
- Bus (SeGwan station)
  - 141, 401, 640, 145, 440
  - 3011, 3414, 4431, 6411, 4212
  - 41
  - 6704

